Los Angeles Countywide Information Exchange Network (IEN)

Since 2002, the Los Angeles County Department of Public Works (LACO DPW) has been operating the Los Angeles Countywide Information Exchange Network (IEN). Developed by TransCore, the IEN is a coordinated network for integrating Agencies' traffic control systems (TCSs)

into a Regional framework. The IEN supports Agency traffic signal operations at three levels: Local, Corridor, and Regional. At the Local level, the individual Agency TCS serves as the backbone for day-to-day traffic signal operations. The Agency TCS provides the ability to alter signal timings from a remote location and provides for enhanced maintenance and operational responses to local traffic conditions and events. The IEN integrates activities at this Local level by establishing a sub-Regional or Corridor level of operations. The Corridor level supports inter-Agency coordination and joint signal operations. In addition, the Corridor level enables coordination across jurisdictional boundaries, exchange of local traffic data, and joint response to traffic conditions and events that affect more than one jurisdiction. At the Regional level, the IEN permits multi-Agency, cross-Corridor data exchange to enable a Countywide response to traffic conditions and major events.



LA County Transportation Management Center







The IEN's center-to-center (C2C) communications is based on the Common Object Request Broker Architecture (CORBA). Unlike typical C2C deployments in place today, the primary focus of the IEN is for intersection traffic control rather than freeway management, thereby creating a need for second-by-second data transmissions. Key features of the IEN include:

- ♦ A common system interface (IDL) which allows the connection of heterogeneous TCSs onto the IEN backbone
- Second-by-second intersection data exchange to support real-time workstation, intersection, and section displays
- ♦ The ability for smaller Agencies to relinquish control and monitoring for off-hours support and maintenance
- ♦ Incident and planned event tracking system which allows the Agencies to share incident, planned event, and construction activities
- ♦ A scenario manager, which allows the Agencies to establish multi-Agency incident response to congestion, incidents, and events

The development and implementation of the IEN provides a new dimension of performance as Agencies are no longer acting as individual entities, but as an active participant in the Regional traffic community.

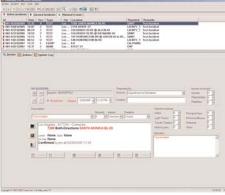
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IEN Program Website:

http://ladpw.org/TNL/ITS/IENWeb/index.cfm



Typical Incident Tracking Window



Typical Intersection Detail

